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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,687	10/17/2003	Dean Willberg	56.0758	2686

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SCHLUMBERGER TECHNOLOGY CORPORATION  
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EXAMINER
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KUGEL, TIMOTHY J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/605,687		WILLBERG ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Timothy J. Kugel		1712	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,5,6,8-10 and 12-16 is/are pending in the application.
- 4a) Of the above claim(s) 12-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,6,8-10,15 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1,5,6,8-10 and 12-16 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1, 5, 6, 8-10 and 12-16 pending as amended on 19 May 2006, claims 2-4, 7 and 11 being cancelled. Claims 12-14 are withdrawn from further consideration.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Specification***

4. Applicant's amendment, filed 19 May 2006, with respect to the correction of minor informalities in the specification has been fully considered and are corrective.

The objection to the specification has been withdrawn.

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The limitation 'on the surface of the formation penetrated by a wellbore' added to claim 15 in the amendment filed 19 May 2006 finds support only in withdrawn claim 12.

### ***Double Patenting***

6. Applicant's terminal disclaimer, filed 19 May 2006, has been fully considered and is proper.

The provisional rejection of claims 1, 9 and 10 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4, 5, 8, 10 and 21-23 of copending Application No. 10/605,784 has been withdrawn.

***Claim Rejections - 35 USC § 102***

7. Claims 1, 5, 10 and 15 stand rejected under 35 U.S.C. 102(b) as being anticipated by Cantu et al. in US Patent 4,986,354 (Cantu '354 hereinafter).

Cantu '354 teaches microencapsulated oil field chemical compositions made by placing an oil field chemical in microcapsules made from condensation products of hydroxyacetic acid alone or with compounds containing other hydroxy, carboxylic acid or hydroxycarboxylic acid moieties such as lactic acid (Column 1 Lines 37-47 and Column 2 Lines 8-15) wherein the condensation products are solids and insoluble in aqueous and hydrocarbon media (Column 1 Lines 50-65), further, a variety of oil field chemicals that fall in the class of solid acid reactive materials may be included in the capsules, and in particular, borate cross linkers (Column 2 Line 42 – Column 3 Line 7). The microcapsules may be placed in an oil-based fluid (Column 3 Lines 40-45); this fluid would effectively act as and/or form a hydrolysis-delaying coating for the capsules.

As to claim 15, the composition taught by Cantu is at least inherently capable of forming a filter cake on the surface of a formation penetrated by a wellbore.

***Claim Rejections - 35 USC § 103***

8. Claim 6 stands, and new claim 16 is, rejected under 35 U.S.C. 103(a) as being unpatentable over Cantu '354.

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Cantu '354 teaches microencapsulated oil field chemical compositions made by placing an oil field chemical in microcapsules made from condensation products of hydroxyacetic acid alone or with compounds containing other hydroxy, carboxylic acid or hydroxycarboxylic acid moieties such as lactic acid wherein the condensation products are solids and insoluble in aqueous and hydrocarbon media, further, a variety of oil field chemicals that fall in the class of solid acid reactive materials may be included in the capsules, and in particular, borate cross linkers as detailed above.

Cantu '354 does not explicitly teach the use of boric acid or borax.

Cantu '354 does, however, teach the use of borate cross linkers in the same context as borax in claim 6.

As borax (sodium borate) is a very common variety of borate cross linker, the teaching of borate cross linkers by Cantu '354 would have made it obvious to one of ordinary skill in the art to employ borax as in claim 6.

Regarding claim 16, Cantu '354 teaches the same composition as claimed in the same context as claimed, one of ordinary skill in the art at the time the invention was made would have expected that the solid acid-reactive material of the Cantu '354 composition would intrinsically be as effective as claimed.

9. Claims 8 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cantu '354 in view of US Patent 5,325,921 (Johnson hereinafter).

Cantu '354 teaches microencapsulated oil field chemical compositions made by placing an oil field chemical in microcapsules made from condensation products of hydroxyacetic acid alone or with compounds containing other hydroxy, carboxylic acid

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or hydroxycarboxylic acid moieties such as lactic acid wherein the condensation products are solids and insoluble in aqueous and hydrocarbon media, further, a variety of oil field chemicals that fall in the class of solid acid reactive materials may be included in the capsules, and in particular, borate cross linkers as detailed above.

Cantu '354 does not disclose expressly the use of any of the specific species called out in claim 9.

Johnson discloses that calcium carbonate and metal hydroxides may be used similar fluids (Column 4 Lines 64-66).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the calcium carbonate or metal hydroxides of Johnson in the composition of Cantu '354. The motivation to do so would have been to include a fluid loss agent in the composition (Johnson Column 4 Lines 64-66).

### ***Response to Arguments***

10. Applicant's amendment and arguments, filed 19 May 2006, particularly amending the solid acid-precursor to be selected from the group consisting of lactide, polylactic acid and mixtures thereof and arguing that US Patent 4,957,165 (Cantu '165 hereinafter) fails to teach this limitation, have been fully considered and are persuasive.

The rejection of claims 1, 8, 9 and 15 under 35 USC 102(b) as being anticipated by Cantu '165 has been withdrawn.

The rejection of claims 1, 8, 9 and 15 under 35 USC 103(a) as being unpatentable over Cantu '165 in view of Johnson has been withdrawn.

The rejection of claims 1 and 15 under 35 USC 103(a) as being unpatentable over Cantu '165 in view of US Patent 6,817,414 (Lee hereinafter) has been withdrawn.

11. Applicant's further arguments filed 19 May 2006 have been fully considered but they are not persuasive.

Applicant argues that Cantu '354 fails to teach a solid acid-precursor that is lactide, polylactic acid or mixtures thereof; however, Cantu '354 does teach solid lactic acid as a precursor (Column 1 Lines 37-47, Column 2 Lines 8-15 and Column 1 Lines 50-65).

Applicant further argues that Cantu '354 fails to teach a mixture of two separate particles; however, this limitation does not appear in the instant claims.

Applicant finally argues that there is no motivation to modify Cantu '354 to use borax when only borates are taught; however, given Cantu '354's teaching of borates, one of ordinary skill in the art at the time the invention was made would immediately envisage sodium borate—that is borax.

### ***Conclusion***

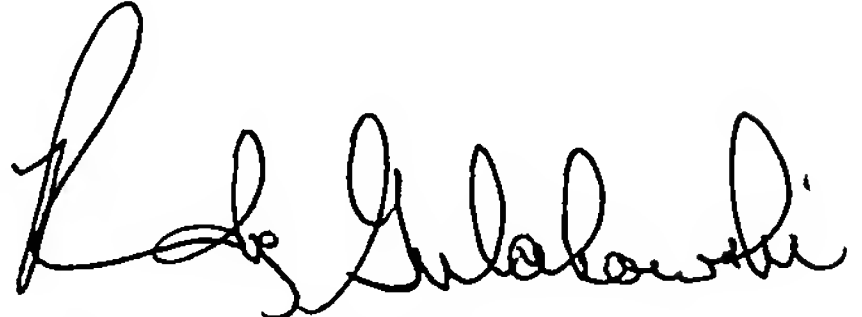
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Kugel whose telephone number is (571) 272-1460. The examiner can normally be reached 6:00 AM – 4:30 PM Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJK  
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